

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

GEBICKI *et al.*

Appl. No. 10/585,892

Filed: January 7, 2005

§ 371 Date: July 11, 2006

For: **Use of Quaternary Pyridinium  
Salts as Vasoprotective Agents**

Confirmation No.: 7625

Art Unit: 1614

Examiner: Nelson Clarence Blakely III

Atty. Docket: 2782.0010001/MAC/C-L

**Declaration of Professor Jerzy Gębicki Under 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, the undersigned, Jerzy Gębicki, Ph.D, declare and state as follows:

1. I am co-inventor of the subject matter of U.S. Application No. 10/585,892 ("the present application"), filed January 7, 2005, which is referenced above. I am a professor at Technical University of Łódź, Poland and a director at the Institute of Applied Radiation Chemistry..

3. I have reviewed and am familiar with the Office Action dated August 31, 2010 ("the Office Action"), issued by the U.S. Patent and Trademark Office in the present application. I have reviewed and am familiar with Wagner *et al.* (*Diabetes Care*, 22:812-817 (1999)), referenced by the Examiner.

4. In the Office Action, the Examiner states that the specification while being enabling for the treatment of hypertriglyceridemia, does not provide enablement for other types of dyslipidemia, such as the lipid disorder hyperapoprotein (B) discussed in Wanger. Thus, the Examiner asserts that the specification does not provide enablement commensurate in scope with the claims.

5. The data summarized below further demonstrate that administering 1-MNA<sup>+</sup> to dyslipidemic patients treats the abnormal lipid profile of the patients. These data were obtained from clinical studies in which effects of administering 1-MNA<sup>+</sup> were investigated in dyslipidemic patients.

6. The enrollment criteria for participating in the clinical studies were: elevated plasma level of TG ( $\geq 190$  mg/dL and  $< 700$  mg/dL). The patients were treated with 1-MNA<sup>+</sup> for 4 weeks. The 1-MNA<sup>+</sup> was administered orally, three times a day, three capsules (3 x 90 mg 1-MNA<sup>+</sup>).

7. Plasma levels of TG and HDL of the patients were measured at 2 sequential measurements during the dietary controlled baseline period and after 4 weeks of therapy. Mean baseline value was calculated as mean value from 2 measurements during the baseline period.

8. Table 1 below shows plasma TG and HDL levels of a group of participating patients at baseline and after a 4-week therapy.

Table 1. Selected patients with HDL < 40 mg/dL, 1-MNA<sup>+</sup> dose: 270 mg (3 x 90 mg)

	TG [mg/dL]			HDL [mg/dL]		
	Baseline	After 4 weeks	% of change	Baseline	After 4 weeks	% of change
1	200.53	199.35	-0.01	37.15	42.18	0.14
2	212.05	205.55	-3.06%	31.73	32.90	3.66%
3	222.09	220.61	-0.66%	35.35	45.28	28.10%
4	243.06	238.33	-1.94%	35.73	42.96	20.22%
5	248.97	264.03	6.05%	36.77	39.09	6.32%
<b>Mean value:</b>	<b>225.34</b>	<b>225.58</b>	<b>0.10%</b>	<b>35.35</b>	<b>40.48</b>	<b>14.53%</b>

9. As can be seen in Table 1, in patients with a HDL of < 40 mg/dL and a TG level between 150 mg/dL and 250 mg/dL, administering 1-MNA<sup>+</sup> did not reduce significantly the TG level, but an increase of the HDL level was observed (35.35 vs. 40.48 mg/dL, a 14.53% increase) after the 4-week therapy.

10. Table 2 below shows plasma TG and HDL levels of another group of participating patients at baseline and after a 4-week therapy.

Table 2. Selected patients with HDL > 40 mg/dL, 1-MNA<sup>+</sup> dose: 270 mg (3 x 90 mg)

	TG [mg/dL]			HDL [mg/dL]		
	Baseline	After 4 weeks	% of change	Baseline	After 4 weeks	% of change
1	507.97	477.55	-5.99%	40.64	42.96	5.71%
2	365.62	272.00	-25.61%	43.73	42.96	-1.77%
3	321.91	246.31	-23.49%	45.80	45.28	-1.13%
4	251.33	209.10	-16.80%	45.80	47.99	4.79%
5	235.09	195.81	-16.71%	51.86	53.02	2.24%
6	256.35	170.11	-33.64%	60.11	62.31	3.65%
7	358.53	303.01	-15.49%	54.83	57.28	4.47%
<b>Mean value:</b>	<b>328.12</b>	<b>267.70</b>	<b>-18.41%</b>	<b>48.96</b>	<b>50.25</b>	<b>2.63%</b>

11. As can be seen in Table 2, in patients with a HDL level of > 40 mg/dL and a TG level of > 200 mg/dL, 1-MNA<sup>+</sup> reduced the plasma TG level (328.12 vs. 267.70 mg/dL, a 18.41% decrease). In those patients, increase of the HDL level was not observed after the 4-week therapy.

12. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the present patent application or any patent issued thereon.

Respectfully submitted,

  
Jerzy Gebicki, Ph.D.

Date: 22 NOV. 2010